OPHTHALMOLOGY UPDATE

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DEPARTMENT OF OPHTHALMOLOGY

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View the expanded website for the IU Department of Ophthalmology at www.iueye.iu.edu.

Eye Resources for Consumers can be found at www.eyecare.iu.edu/html/eye_info.shtml.

For Resources for Eye Professionals, go to http://www.eyecare.iu.edu/html/eye_prof.shtml.

DEPARTMENT SCORES TOP RANKING

The IU Department of Ophthalmology was ranked first out of 19 clinical departments at the Indiana University Medical Center in surveys of patient and referring physician satisfaction in calendar year 2004.

Paul R. Cook, M.D., M.H.A., chief executive officer of IU Medical Group-Specialty Care (IUMG-SC), the practice arm of clinical faculty at the Indiana University School of Medicine, commended the Department of Ophthalmology for scoring highest among the IUMG-SC departments. "We thank you for the expertise, effort, and teamwork that brought about this result, and we celebrate your success," he wrote.

The ranking was based on two surveys: a telephone interview survey of patients seen at the Ambulatory Outpatient Center at the IU Hospital in July 2004 and a mailed satisfaction survey, conducted continuously, of referring physicians and of patients seen at the Ambulatory Outpatient Center and the IUMG facility, Spring Mill Medical, in Carmel. Questions on the survey centered around four areas: physicians' manner and skills; office efficiencies; access to services; and awareness and image of IUMG-SC.

Robert D. Yee, M.D., chairman of the IU Department of Ophthalmology, hailed the results of the survey. "Our nurses, clerks, technicians, and other staff members place achieving the highest quality of patient care possible as their main goal. We are very gratified that our patients and referring physicians have rated our services highly."

The IU Department of Ophthalmology, which was founded in 1908, comprises over 140 employees—doctors, nurses, researchers, technicians, and administrative and secretarial staff members. The clinical faculty, residents, and fellows of the Department see patients at four different locations at the IU Medical Center (i.e. Riley Outpatient Center; University Hospital & Outpatient Center; Regenstrief Eye Clinic; and Roudebush VA Medical Center) and at IU Eye at Carmel.

Additional information about the IU Department of Ophthalmology can be found on the Internet at **www.iueye.iu.edu**.

OPTOMETRY-OPHTHALMOLOGY LAUNCH PARTNERSHIP

On February 16, 2004, the Indiana University (IU) School of Optometry joined forces with the Department of Ophthalmology, IU School of Medicine when the IU Eye at Carmel Optometry Clinic opened its doors for the first time.

Months earlier, **Robert D. Yee, M.D.**, chairman of the IU Department of Ophthalmology, had approached Dean Gerald E. Lowther, O.D., Ph.D., dean of the IU School of Optometry, with the idea of opening practicing clinics adjacent to each other at the Department's first satellite facility in Carmel. After much discussion, it was felt the arrangement would be a worthwhile one for both sides. The ophthalmologists would

get experienced optometric services, such as refraction and specialty contact lense fittings, and staff who knew how to run a successful eyewear dispensary, and the optometrists would get the additional knowledge and resources of the ophthalmologists.

It turns out to be a fruitful agreement.

Notes Dean Lowther, "The School of
Optometry is pleased with the cooperative
arrangement with the Department of
Ophthalmology in the Carmel clinic. It is
an opportunity to provide patients with the
highest level and broadest range of vision
care possible. This is an excellent example
of how the professions can work together
continued on page 13



The IU Eye at Carmel Optometry Clinic offers a wide selection of eye wear as well as the full range of optometric services at its new facility adjacent to the IU Department of Ophthalmology's Carmel location.

ECCO VISION PROGRAM REACHES UNINSURED

In late 2003, the Nina Mason Pulliam Charitable Trust awarded the IU Department of Ophthalmology and the IU School of Optometry a \$150,000 grant to coordinate health services for low income, uninsured persons living in Marion County and the seven surrounding counties. In its first year of operation, the Eye Care Community Outreach (ECCO) program has matched over 500 impoverished, uninsured persons with the donated care of generous local eye care professionals.

Two health professionals, Dewana Allen, MPH and Kelli Barker, MSW, administer the program which seeks "to improve vision health care through community collaboration, advocacy, education, and donated professional eye care." "I think the program is an excellent and much needed benefit to the community," states Ms. Allen. "We have been able to help individuals in the community access health care whereas before they couldn't be connected to the resources."

"The ECCO program fills a growing gap in the lack of accessibility of vision care," adds Ms. Barker.

What services does ECCO provide?

ECCO facilitates access to donated vision exams and eyeglasses; refers ECCO patients with non-vision social and medical needs to the appropriate community resources; distributes visual health education material at various community health fairs; and coordinates community education sessions to raise awareness of the importance of visual health, especially within populations at higher risks of developing eye diseases.

What about community collaboration?

A written program report issued late last year states, "The program works closely with Project Health, a newly-developed program of the Indianapolis Medical Society. Project Health...is a community partnership to improve access to specialty health care for low income, uninsured residents of Indianapolis. They achieve this through coordinating the donated services of physicians, hospitals, medication assistance programs and case management, which all

greatly enhance the quality of healthcare. In addition to Project Health, ECCO collaborates with numerous other local social service agencies, homeless shelters, health clinics, and schools to outreach to those who may not traditionally have access to vision health services."

What are the eligibility guidelines?

Individuals must meet the following conditions to receive donated eye care:

- have no vision health insurance; have an income at or below 200% of the poverty level (maximun of \$19,140/yr for one person)
- be a resident of Marion County or the seven surrounding counties (i.e. Boone, Hamilton, Hancock, Shelby, Johnson, Morgan, or Hendricks).

However, even if persons do not qualify for ECCO service, they are assisted in finding vision and health care.

How does the referral process work?

Community agencies and clinics refer individuals needing vision care and who meet the ECCO eligibility guidelines to the coordinators. The coordinators then screen the persons for private insurance and vision services needed (i.e. optometric, ophthalmic, or other medical/social services). The program coordinators contact participating eye care professionals to set up appointments for the patients. After the appointment, the participating optometrists and ophthalmologists send referral forms back to ECCO so that data can be compiled on quality and quantity of services delivered.

The ECCO program has been "overwhelmingly welcomed into the community by both potential collaborators and patients alike, many of whom felt excluded from accessing adequate vision care. ECCO fills gaps in the health care system and provides a continuum of care for adults and children, while also providing community educational prevention to raise awareness of the importance of visual health and annual eye exams."

For more information

Persons knowing someone who needs vision assistance or who want to find out more about the ECCO program, should contact Dewana Allen (317-321-1413, dewaalle@indiana.edu) or Kelli Barker (317-321-1424, kelebark@iupui.edu). Additional information about the ECCO Program is available on the web at http://www.opt.indiana.edu/ecco.

INDIANA UNIVERSITY DEPARTMENT OF OPHTHALMOLOGY

■ Vision Statement

The continued vision for the Indiana University Department of Ophthalmology is to become a premier ophthalmology and visual sciences institution based upon a fundamental commitment to the highest standards of vision research, ophthalmic patient care, and education and to the continual development of nationally-respected faculty and staff.



Visit the Indiana University
Department of Ophthalmology
website at
www.iueye.iu.edu

OPERATION KIDSIGHT SCREENS FOR AMBLYOPIA IN PRESCHOOLERS

Over 6,500 Indiana preschoolers have been screened for amblyopia (vision loss) since July 2003 in Operation Kidsight, a three-year, joint program of the IU Department of Ophthalmology, the IU School of Optometry, and the Indiana Lions Clubs.

For these screenings, individual Lions Clubs send volunteers throughout Indiana to "photoscreen" pre-schoolers for amblyopia. In the photoscreening process, the child's eyes are photographed using a special flash technique, basically a Polaroid picture of the red eye reflex with which most photographers are familiar. Depending on the nature of the light reflections obtained, the ophthalmologists determine if the child is at risk for amblyopia. Photoscreening is 85–90% effective in detecting the problems which can cause reduced vision in children.

"We've made tremendous progress in different parts of the state," notes Janice Chapman, coordinator of Operation Kidsight.

Lions View

Charles Haffner, Program Director of Operation Kidsight for the Indiana Lions Foundation, provides a Lion's perspective of the program. Mr. Haffner, a retired middle school principal, is devoted to the program. "The medical profession has known for 50 years the importance of early vision screening for children, but we've had no [comprehensive] program in Indiana to effectively reach our children," notes Mr. Haffner. Operation Kidsight helps fill this void.

The approach of Operation Kidsight is two-fold: to assist in protecting children's eyesight by offering these screenings and at the same time, educating parents as to the importance of eye examinations for children. "The average parent feels that the pediatrician checks his /her child for everything, when in reality, most pediatricians have only limited training in identifying vision problems."

Another part of the problem is that some people only rarely come into contact with the medical system. "About a third of our

population is missed because they just don't have the interaction with the medical system. This is tragic especially with something (vision screenings) this easy to do," states Mr. Haffner.

"People are just not aware of the devastation that vision problems cause," he states. "The earlier the vision problem is caught, the greater the chance that the problem is treatable and the less expensive the problem is to fix. We discovered a child that had already gone blind in one eye and his parents didn't even know," relates Mr. Haffner.

Medical Director's View

Daniel E. Neely, M.D., is medical director for Operation Kidsight. He writes the following: "Last year we screened 4,847 children. This surpasses our goal of 3,000 in the first year. We would like to double the size of the program every year for the next four years, and this year our goal is 6,000 children. The eventual need to cover every child at a single age level in the state of Indiana is approximately 75,000.

"Preschool vision screening does exist in Indiana; we are not the first to provide this service. Prevent Blindness Indiana, in particular, has done a nice job of screening school aged and younger children. Other organizations and individuals also perform various amounts of vision screening. The problem is that no uniform, statewide program exists to target this most vulnerable population of preschool children at risk for amblyopia. We hope to help fill the gaps and eventually would like to be able to screen every single child in Indiana before they get to school age.

"The target population of preschool children (age 1 to 5) is not only the most vulnerable to amblyopia related to refractive errors, strabismus, ptosis, and cataracts. They are also the most difficult to screen because they may be preverbal or unwilling/unable to read a standard eye chart. Therefore, we are using a photoscreening camera, the MTI photoscreener, to take Polaroid photos of the eye's 'red reflex.' The characteristics of these

photographs are then interpreted by a special reading center at Vanderbilt University in Nashville, Tennessee. We eventually hope to interpret our own photographs once we have established sufficient volume to be proficient and accurate with a high degree of reliability.

"Once a child fails a screening, (s)he is referred to a local ophthalmologist or optometrist for a comprehensive eye examination (on a fee-for-service basis), and we collect a follow-up form to insure that adequate examination and follow-up have been arranged. The results are recorded in our database so that we can monitor the quality of our photoscreening interpretations. If a family needs help finding a doctor, arranging for insurance or paying for services, this is handled on a case by case basis. The program is not designed to offer free eye care.

"As of early April 2005, 5,971 children had been screened. Of these, 309 were referred to doctors. Of those referred, follow-up forms were received for 137. Of these, 74% were found to have amblyogenic risk factors and required treatment. Obtaining and insuring appropriate follow-up is the most difficult task. Our program has provision to add a follow-up care coordinator, and this should help considerably."

Future

While the program is being launched by a three-year grant from Lions Clubs International along with the Indiana Lions, at the end of three years, the program does not disappear," says Dr. Neely. "It is designed to be self-sufficient and has a mechanism in place that provides ongoing funds that will match the increasing volume of the program."

Program Information

To find out about the nearest screening for your child or to arrange for a free screening for your child's preschool or day care, contact Janice Chapman, Operation Kidsight, at (317) 578-0491, kidsight@sbcglobal.net.

PHYSICIANS SUPPORT ORBIS' WORK

According to ORBIS International, a non-profit, humanitarian organization dedicated to preserving and restoring sight in the developing world, more than 90% of the world's visually-impaired people live in developing countries, a staggering 13.6 million blind people in China and India alone. ORBIS is committed to closing the gap between eye care in the developing world and in the industrialized nations.

ORBIS is most well-known for its "Flying Eye Hospital," a fully-equipped teaching facility built inside a DC-10 airplane which travels around the world, stopping off to treat persons in desperate need of eye care and to train local eye professionals in ophthalmic procedures. Additionally, however, ORBIS conducts hospital-based programs in developing countries and has established long-term programs in Bangladesh, China, Ethiopia, India, and Vietnam.

Eugene M. Helveston, M.D.

The Indiana University Department of Ophthalmology's ties to ORBIS go back 20 years, when **Eugene M. Helveston, M.D.**, faculty member in the department's Pediatric Ophthalmology and Adult Strabismus Service, first started traveling to foreign countries to help train local eye professionals. Wishing he could continue the partnerships he had established with

these fellow physicians, he devised a way for local doctors to send digital photographs of medical cases to him over the Internet for two-way consultation and training.

In 2002, ORBIS took up Dr. Helveston's visionary concept in medical telecommunications, dubbed Cyber-Sight. From modest beginnings, eye professionals at 46 hospitals in 24 countries around the world and approximately 130 volunteer American ophthalmologists now participate in the Cyber-Sight telemedicine program. In addition, 130 students are involved in the e-learning component of the program, which will issue more than 1,000 hours of continuing education credits this year. Dr. Helveston recently assumed the title of Ophthalmologist-in-Chief at ORBIS.

Through the years, a number of IU Department of Ophthalmology physicians have participated in some aspect of ORBIS' work. These include: Forrest D. Ellis, M.D., DC-10 [plane] program to Cuba and Spain; David A. Plager, M.D., DC-10 program in Cuba; Derek T. Sprunger, M.D., DC-10 program in Tiyuan, China; Naval Sondhi, M.D., DC-8 program in Santo Domingo and India.

Those assisting with the development of or serving as telementors for Cyber-Sight

include: Richard A. Burgett, M.D.; Louis B. Cantor, M.D.; Ronald P. Danis, M.D.; Hua Gao, M.D.; Daniel E. Neely, M.D.; Robert D. Yee, M.D.; and Faruk H. Orge, M.D., ORBIS fellow in pediatric ophthalmology, who was extensively involved in the development of the Cyber-Sight website.

The following physicians, former pediatric ophthalmology fellows at the IU Department of Ophthalmology, are also contributing participants with Cyber-Sight: Drs. Steve Archer, Bradley Black, Werner Cadera, David Coats, Keith Engle, Ed O'Malley, and Rick Saunders.

Daniel E. Neely, M.D.

Daniel E. Neely, M.D., pediatric ophthalmologist and associate professor of ophthalmology at the IU Department of Ophthalmology, is but one of several colleagues of Dr. Helveston's at the IU Department of Ophthalmology who have answered the call of service to participate in ORBIS' humanitarian efforts.

The article below describes three areas of Dr. Neely's involvement with Cyber-Sight, namely, as an in-country trainer of local eye professionals in Vietnam; a sponsor of visiting Vietnamese ophthalmologists here in Indiana; and as an active telementor for the Cyber-Sight program.

DANIEL NEELY, M.D. TRAINS VIETNAMESE OPHTHALMOLOGISTS

Under the auspices of ORBIS International (see above), **Daniel E. Neely, M.D.**, Associate Professor of Ophthalmology at the IU Department of Ophthalmology, traveled to Vietnam in February 2005 to train pediatric ophthalmologists there. For a week, he worked with doctors at the Vietnam National Institute of Ophthalmology, a 350-bed hospital in Hanoi in North Vietnam and at the Ho Chi Minh City Eye Hospital in South Vietnam.

He described the conditions there as extremely difficult. "They have inadequate sutures, no needle holders, no scissors. The The equipment we take for granted, they don't have.

A scalpel is a straight razor blade with the edge broken off.

For cautery, they heat a muscle hook in an open flame and touch the hook to the blood vessel.

~ Daniel E. Neely, M.D., Associate Professor of Ophthalmology IU Department of Ophthalmology equipment we take for granted, they don't have. A scalpel is a straight razor blade with the edge broken off. For cautery, they heat a muscle hook in an open flame and touch the hook to the blood vessel," he said.

The trip in February was Dr. Neely's third trip to Vietnam in as many years. Typically, he sees about 45 patients on the first day. He and the doctors talk about each patient and then schedule surgery as necessary. He performs surgery in the morning and sees post-operative patients or new patients in the afternoon. In between, he gives 2-3 lectures to the doctors and hospital staff. By the end of the week, he will have seen 80-100 patients and performed 10-12 surgeries—what Dr. Neely called a "concentrated experience."

He sees patients with the range of pediatric ophthalmology conditions, including complicated strabismus, pediatric glaucoma, and cataract, and retinopathy of prematurity. General anesthesia is not readily available. For surgery, patients are uniformly sedated heavily. "It's not very safe for children. You cannot operate on infants. Congenital cataracts and congenital glaucoma go untreated. By the time the children can be safely treated, the damage has already been done," Dr. Neely stated.

As a follow-up to his trips to Vietnam, Dr. Neely talked about Vietnamese fellows at the Department and his work on the ORBIS telemedicine program.

From February to July 2004, two Vietnamese physicians, Le Kim Xuan, M.D. and Do Quang Ngoc, M.D., travelled to the IU Department of Ophthalmology for a 6 month fellowship, sponsored by ORBIS. They observed American medicine and read medical texts voraciously in the Morrison Eye Library. In Vietnam, books are impossible to come by," explained Dr. Neely. "I helped them get about 100 books off E-Bay before they left."

As for telemedicine, Dr. Neely, a member of the Cyber-Sight Advisory Board, is committed to the program. He has participated in over 200 telemedicine consultations, 90% of them strabismus cases, since 2003. He appreciates the time he has spent working with his Vietnamese

PHYSICIANS TEST SURGICAL SIMULATORS



David Rogers, M.D., second-year resident at the IU Department of Ophthalmology, practices his surgical skills using EYESI Ophthalmosurgical Simulator, a state-of-the-art simulation-based ophthalmic surgery teaching device. The residents were testing out this simulator for ORBIS International, which plans to use simulators to train ophthalmologists around the world in the successful performance of ophthalmic surgery.

Residents and faculty had a chance to test out equipment which will be used by ORBIS International (see page 4) to train ophthalmologists world-wide in ophthalmic surgical techniques. Plans are for the EYESI Ophthalmosurgical Simulator to be deployed on ORBIS' Flying Eye Hospital in July 2005 after ORBIS' own staff have received thorough instruction in its use.

The doctors found this simulation "breathtakingly real," according to **Eugene M. Helveston, M.D.**, Emeritus Professor of Ophthalmology, who was responsible for providing the Department's physicians with the opportunity to give this state-of-the-art virtual reality equipment a trial run.

The EYESI Simulator has four tests for basic skills, testing eye-hand coordination, and four clinical skills, calling for removal of several types of epiretinal membranes. The specific surgical tasks currently available on the simulator can be presented to students as a comprehensive learning task. Students are automatically graded on the basis of speed and accuracy and must attain a passing grade to proceed to the next task.

ORBIS plans to offer this training especially to residents and younger doctors who have less of an opportunity to perfect their skills in the operating room. The EYESI Simulator is manufactured by VR magic of Mannheim, Germany. A new model due shortly will feature cataract surgery and models under consideration include those for strabismus, corneal transplant, glaucoma, and ptosis (drooping eyelids).

counterparts. Now when he has a telemedicine case from them, he knows what they can and can't do, as he is familiar with the equipment and expertise they have available. "The telemedicine program is working. It's a great tool for on-going teaching and patient care."

Summing up the Vietnamese and his time there, Dr. Neely relates that "the Vietnamese really do like Americans. Most are very eager to learn how we do things. They want to learn about America," explained Dr. Neely. "I would go back. It's been a good experience."

RICK BURGETT, M.D. DEVOTED TO OCULOPLASTICS AND HIS PATIENTS

Richard A. (Rick) Burgett, M.D., F.A.C.S.,

oculoplastic surgeon at the IU Department of Ophthalmology, thrives on variety. That's good news for his patients because not only does he see a wide variety of medical problems, but he practices medicine at a different location every day.

Oculoplastics, or ocular plastic surgery, covers a wide spectrum of eye diseases or disorders from orbital and facial trauma, orbital tumors, and tear drainage obstructions to malpositions of the eyelids related to age or tumors to the surgical removal of eyes. Difficult problems don't frustrate him. Rather, he relishes procedures and problems that allow him to improvise. "You have to adapt as to the nature of the case," he notes.

Indeed, this is partly what attracted him to oculoplastics as a resident. He enjoyed the "carpentry" of the surgery, that is, building something which is anatomically and physiologically sound mechanically. He also liked the interdisciplinary interactions between ophthalmologists, otorhinolaryngologists, neurosurgeons,

and plastic surgeons on the bigger trauma or tumor cases.

He gets satisfaction out of the reaction of his patients. The outcome of the surgery is usually quite good and patient satisfaction is high. "Some of my best days are "postop(erative)-patients-doing-well days. Those days are enjoyable and gratifying," he says.

Dr. Burgett follows a hectic weekly patient schedule, treating patients at the department's newest facility, IU Eye at Carmel, and the Spring Mill Surgery Center, as well as at the Midwest Eye Institute, Methodist Hospital, and a satellite facility in Fort Wayne. His administrative secretary, Anita Roberts, maintains an office at the Rotary Building at the IU Medical Center and his surgical assistant, Tammy Smith, goes wherever he goes, doing her best to stay one step ahead of the schedule.

Dr. Burgett and his wife, Mindy, a practicing dentist in Fishers, Indiana, have three children: a fourth-grader, a first-grade student, and a preschooler. Not surprisingly, he finds it most challenging to juggle his responsibilities to his patients with his responsibilities to his family or "covering all your bases adequately," as he describes it. As to the future, besides teaching, Dr. Burgett just wants to "take care of people, to try and help them as best I can." His present and future patients hope he gets his wish.

Dr. Burgett is a graduate of Wabash College and Indiana University School of Medicine. He did his residency at the IU Department of Ophthalmology and fellowships in neuro-ophthalmology and oculoplastic and orbital surgery at the IU Department of Ophthalmology and the Midwest Eye Institute. Dr. Burgett was appointed to the IU Department of Ophthalmology as an Assistant Professor of Ophthalmology in 2001. He was awarded Professor of the Year honors in 2002 and 2003.

Dr. Burgett, who has a well-developed sense of humor and an encyclopedic memory for trivia, enjoys both mountain and road biking. He participates in the Hilly Hundred race in Ellettsville, Indiana every October.



CANTOR HONORED

An afternoon reception at Asherwood, the estate of Mel and Bren Simon, marked the formal celebration of Dr. Louis B. Cantor's naming to the Jay C. and Lucile L. Kahn chair for Glaucoma Research and Education at the IU Department of Ophthalmology.

Louis B. Cantor, M.D. received a plaque presented to him by Robert D. Yee, M.D., chairman of the IU Department of Ophthalmology at the event hosted by the Simons. Drs. Cantor and Yee gave the gathering of some 40 faculty and friends of the department an update on glaucoma treatment and an overview of glaucoma research. Additionally, they stressed to the group the critical importance of private philanthropy to the advancement of research.

Coincidentally, the April 16, 2005 event fell on Lucile Kahn's 103rd birthday; Mrs. Kahn died in 2002 at the age of 100. She was a major benefactor and supporter of local organizations.

OPHTHALMIC TECHNICIANS ENTHUSIASTIC ABOUT THEIR WORK

Before the ophthalmologist enters the exam room, the friendly person greeting and working with patients is likely one of the many ophthalmic technicians utilized by the IU Department of Ophthalmology. These dedicated employees assist the physicians in obtaining medical histories from patients and in performing various diagnostic tests for the doctors.

Two technicians, **Debra Kiemeyer, C.O.T.** and **Barbara Marbeiter, C.O.T.**, shared their thoughts on being ophthalmic technicians. Deb has worked for the department for 10 years and spent 16 years in the vision field; Barb is a five-year employee of the department with 13 years total experience. They both work at the department's clinic on the third floor of the IU Hospital & Outpatient Center.

Deb and Barb are enthusiastic about the nature of their jobs and specifically, about working for the IU Department of Ophthalmology. "To me, this is just the best of the places to work. The best of the best," stated Deb. Together they noted, "We are exposed to diagnoses that you don't see elsewhere. The emphasis is more on solving problems and education. The outlook is on curing disease-cutting edge stuff. You just don't have that out in the field. Doctors send patients here to us."

Barb enjoys the variety and challenges of her job. "It's not the same old thing every day. Every eye is different. I enjoy the patients and thinking about the disease process. We have a wonderful opportunity to work with the doctors; I've learned so much," she states.

Deb, Barb, and the other medical technicians for the department perform a range of ophthalmic tests, some quite technical. They acknowledged that many doctors in the field don't have the equipment to do sophisticated testing. They pointed out the role of the department's ophthalmic photographers in being able to provide optical coherence tomography and fluorescein angiograms and of the valuable contribution made by the department's ophthalmic nurses.

CLINICAL SUPPORT STAFF

Ophthalmic Technicians

Donna Bates, C.O.A.
Wilma Bible-Collier, C.O.A.
Jennifer Burnam, C.O.A.
Sarah Cesnik, C.O.A.
Teresa Cole, C.O.A.
Tammy Cornell
Tom Hemsley, C.O.A.
Joni Hoop, C.O.A.
Deb Kiemeyer, C.O.T.
Kristy McDannald, C.O.T.
Lissa McNulty, R.D.M.S., R.O.U.B.
Barbara Marbeiter, C.O.T.
Charlene Miller, C.O.A.
Linda Morgan, C.O.A.
Cheryl Phillips, C.O.A.

Tammy Smith

Sean Stotts, C.O.A.

Janice Walters

Michele Whitaker, C.O.T.

Nina Wilson

Ophthalmic Nurses

Julie Drew, R.N. Robert Lambert, R.N. Kristen Murray, R.N. Linda Pratt, R.N. Nora Sackett, R.N.

Ophthalmic Photographers

Paul Fry

Tim Steffens, C.R.A.

"What we have is 'light years' from what most offices can offer," they explained.

Ophthalmic technicians are accredited by the Joint Commission on Allied Health Personnel in Ophthalmology, an international nonprofit corporation that certifies and provides continuing education opportunities to ophthalmic allied health professionals.

There are three levels of accreditation for ophthalmic technicians and one subspecialty.

The Certified Ophthalmic Assistant (C.O.A.), the first level, requires a knowledge of the basic physiology of the eye; the ability to perform most ocular diagnostic testing procedures; and be able to identify physiologic abnormalities of the eye. Students must pass a home study test and then a national test to become a C.O.A. They then must accumulate a set number of continuing education credit hours over

The Certified Ophthalmic Technician

the next three years to maintain their

certification.

(C.O.T.) is the second level. The person must possess knowledge and skill in clinical optics, basic ocular motility, visual field, contact lenses, intermediate tonometry, ocular pharmacology, and photography. The candidate must pass a skills test and then a written test to become a C.O.T. Additional continuing education credits are also required for this level.

The third level is the **Certified Ophthalmic Medical Technologist** (C.O.M.T.). There are a limited number of specialized C.O.M.T. programs in the country and a small number of C.O.M.T.s.

A subspecialty is available in **Ophthalmic Surgical Assisting**.

The department provides a way for the technicians to meet their requirements by providing monthly faculty-lead classes. "We're very fortunate here. We have a lot of opportunity to learn. We're up on continuing education," noted Deb and Barb.

Robert D. Yee, M.D., chairman of the IU Department of Ophthalmology, appreciates the specialized skills that all the department's technicians bring to their jobs. "We rely heavily on the skills of our ophthalmic technicians for accurate and efficient eye examination. Considerable amounts of knowledge, technical skills and people skills

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RETINA/NEUROSCIENCE RESEARCH

CLINICIANS SHARE THOUGHTS ON RESEARCH

In July 2003, Hua Gao, M.D., Ph.D. (pronounced "Wha Gow") joined the Retina Service at the IU Department of Ophthalmology. Dr. Gao, who was appointed an assistant professor of ophthalmology, came to the department from Baylor College of Medicine in Houston, Texas, where he had completed a fellowship in vitreo-retinal diseases and surgery. The following year in August, he was joined by M. Ovais Peracha, M.D., Assistant Professor of Ophthalmology, who was also a graduate of the Baylor retina fellowship program.

While these two vitreo-retinal clinical specialists maintain a full-time patient load, they also are active researchers. Dr. Gao described three types of research at the department: basic science, clinical research, and clinical trials

The key part of **basic research** is initiating an idea and then studying the mechanism of the disease involved. Indeed, it is the foundation of any medicines developed. While basic research may involve animal models or human tissue, it is not (human) subject-based. The Retina Service researchers are studying some of the mechanisms involved in age-related macular degeneration (AMD) and diabetic retinopathy.

Clinical research lies between basic science and clinical trials. Research ideas are initiated by scientists, and the research can be either animal or human. The intellectual property of the research belongs to the scientists. The Vitreo-Retinal Service is involved in a number of research projects involving AMD, diabetic retinopathy, retinoschisis, and endophthalmitis.

In **clinical trials**, the idea behind the research and the intellectual property belong to the company involved. Dr. Gao characterized doctors as collaborators with pharmaceutical companies in gathering data on new ophthalmic drugs and procedures. The doctor is a participant not an initiator

of research. In the development of drugs, clinical trials are the last steps before FDA approval.

The Vitreo-Retinal Service is involved in several clinical trials involving macular degeneration and macular edema, as well as a long term study funded by the National Institutes of Health on the ocular complications of AIDS. **Linda Pratt, R.N.**, clinical research specialist, noted that the Vitreo-Retinal Service has been a recognized site for clinical research for a long time. "Once you develop a [good] reputation, the pharmaceutical companies come back," she explained.

Both Dr. Gao and Dr. Peracha have been making steady progress in research activities since joining the department. While they each have their own research, they also collaborate with each other, as well as with other members of the department. Presently, they are working with Louis B. Cantor, M.D.; Alon Harris, Ph.D.; Darrell WuDunn, M.D., Ph.D.; and Chi-Wah (Rudy) Yung, M.D. on several studies involving macular degeneration, trabeculectomy, and macular edema. They also work with residents and medical students on studies of interesting cases seen in the clinics and with research fellows.

A major challenge for clinician researchers is to carve out time for research in the midst of very busy days spent treating patients. Often the evenings and weekends are spent writing papers and conducting research. Another challenge, which is faced by all researchers, is funding. They must always be on the hunt for new grants. Echoing a common sentiment, Dr. Peracha noted that it is one matter to have a research idea but another to be able to support it.

Dr. Gao received his M.D. degree from the Shanghai First Medical College in China and did his residency at the IU Department of Ophthalmology. Dr. Peracha received his M.D. degree and did his residency at the Wayne State University School of Medicine in Detroit, Michigan. RETINA AND VISUAL
NEUROSCIENCE
RESEARCH
PERSONNEL
IU DEPARTMENT
OF OPHTHALMOLOGY

listed alphabetically

Mark H. Criswell, Ph.D. Director, Retina Service Research Laboratories

Hua Gao, M.D., Ph.D.Director, Vitreo-Retinal Diseases and Surgery Service

Hongdi Meng, M.D., Ph.D. Researcher

M. Ovais Peracha, M.D.Assistant Professor
of Ophthalmology

Linda Pratt, B.S., R.N. Clinical Research Specialist

Xiaoxi Qiao, M.D., Ph.D. Director, Visual Neuroscience Laboratory

Wei Wang, M.D., Ph.D. Researcher

Wen-Zheng Hu, M.D., Ph.D. Researcher

Carmen Armour
Office Staff

Vicki Lee, B.S., M.A.

Office Manager

Stacy Weddle

Office Staff

RETINA/NEUROSCIENCE RESEARCH

RESEARCH COLLABORATION IMPORTANT GOAL FOR MARK CRISWELL, Ph.D.

Mark H. Criswell, Ph.D. is an assistant research professor of ophthalmology and the director of the Retina Service Research Laboratories, located in the basement of the Riley Research Building. As a member of the IU Department of Ophthalmology since1998, Dr. Criswell has had time to establish both his research and his research ties. He values the expertise and different perspectives that scientists in other subspecialties and departments bring to his work.

Thoughts on Shared Research

"Twenty years ago, researchers did their own individual projects in their own labs, but we are not isolated research scientists anymore," he states. "Today, people have to work together. With all the changes in technology and advances in cell biology and molecular biology, any one scientist doesn't have the expertise to look at all the dimensions of a problem. Collaboration helps to move the science forward."

Dr. Criswell notes that he works with fellow scientists on their particular topics of interest and they reciprocate by collaborating with him, in what he calls a "mutually-beneficial relationship." "It's the kind of approach that helps everyone. It's what makes science fun. I do this [research] because it is fun, worthwhile, and has a benefit to it," he explains.

On-going Research

In conjunction with researchers at the National Eye Institute in Bethesda, Maryland, Dr. Criswell is investigating the use of microimplants (micronized spheres) of corticosteroid triamcinolone acetonide to inhibit pathologic neovascularization (abnormal blood vessel development) that occurs in patients with the wet form of age-related macular degeneration (AMD). The triamcinolone compound that they are evaluating doesn't contain the preservatives normally found in the commercial drug, which originally was approved as an intrajoint arthritic agent. In the eye, these preservatives have the potential to cause side effects.

In joint research studies with other scientists from the IU School of Medicine, and, in particular, with the Indiana Center for Vascular Biology and Medicine, Dr. Criswell is evaluating the specific roles that growth factors play in the process of angiogenesis, the molecular and cellular process that underlies new blood vessel growth in damaged tissues. After inducing localized trauma, the time course for the expression of individual growth factors can be measured and linked to the appearance of new blood vessels. Though pharmaceutical companies have focused their attention on vascular endothelial growth factor (VEGF) as an important mediator of angiogenesis, Dr. Criswell and his colleagues suspect that

in reality many of the approximately two dozen or more growth factors that are involved in this process, including hepatocyte growth factor (HGF) and basic fibroblast growth factor (bFGF), play key roles in blood vessel formation.

Wen-zheng Hu, M.D., Ph.D., a research associate in the department, is performing the molecular studies on these growth factors while Dr. Criswell and others are conducting the histologic and confocal microscopy studies to look at the associated development of new blood vessels in the retina. The "histology and molecular data are matching up," he reports.

With colleagues in the IU Department of Physiology, Dr. Criswell is investigating the underlying mechanisms of diabetic retinopathy—a "hot research area" right now. He also collaborates with fellow faculty member, **Shao-Ling Fong, Ph.D.**, Associate Professor of Ophthalmology, in a number of research studies, including a new mouse model that lacks cone photoreceptor development in one-half of its retina and thus has the potential to be an important genetic model for retinal disease research.

Dr. Criswell received his bachelor's degree and doctorate from Indiana University and did postgraduate work at the The Chicago Medical School.

IU EYE RESEARCHERS RECEIVE MAJOR GRANT

The Indiana University Department of Ophthalmology has received a \$110,000 grant from Research to Prevent Blindness (RPB) to support research in the causes, treatment, and prevention of blinding diseases. RPB is the world's leading voluntary organization supporting eye research. To date, this organization has awarded grants totaling over \$1.5 million to Indiana University.

"The unrestricted development grant from Research to Prevent Blindness has been invaluable in supporting the research programs in our department," states **Robert D. Yee, M.D.**, chairman of the IU Department of Ophthalmology. "It is especially helpful because we can use the funds to create new research laboratories and begin new research programs, which later can compete successfully for funding from other extramural sources. Almost every research program in the department has benefited directly or indirectly from RPB grants." since it was founded in 1960, RPB has channeled hundreds of millions of dollars

to medical institutions throughout the United States for research into all blinding eye diseases. Adds Dr. Yee, "RPB has been the leading advocate for research in vision and ophthalmology in the United States and was instrumental in helping to establish the National Eye Institute within the National Institutes of Health. In addition to its national support for eye research, its development grants to individual academic departments of ophthalmology are supporting research at the grass roots level."

RETINA/NEUROSCIENCE RESEARCH

DR. XIAOXI QIAO SETTLES INTO HER RESEARCH

The director of the Visual Neuroscience Laboratory at the IU Department of Ophthalmology is **Xiaoxi Qiao**, **M.D.**, **Ph.D.** (pronounced "Shao-she Chow"). Dr. Qiao, who holds joint appointments in ophthalmology, pharmacology & toxicology, and neuroscience, came to the IU Medical Center in 2003.

The main focus of Dr. Qiao's research is the mechanism of angiogenesis, the runaway growth of new blood vessels which underlies diabetic retinopathy and age-related macular degeneration (AMD). She expressed a bit of concern about her work here at first. Though she had performed basic neuroscience research for 17 years, being research faculty in a clinical department was a new experience, and she was a neuroscientist not an ophthalmologist.

It didn't take her long to realize that with the present emphasis on scientific collaboration across the disciples, her fresh perspective was a valuable asset. Conversely, she notes that the approach to research is similar no matter what kind of disease is involved, namely, one must understand the molecular mechanism, identify the critical molecule, and then find out what can block the targeted molecule.

Dr. Qiao's laboratories comprise four rooms in the basement of the Rotary Building. Two rooms are the laboratory proper, one room is office space for laboratory personnel, and the fourth room is a core facility for shared laboratory equipment, such as sophisticated microscopes and plate readers. "We can do advanced techniques here now. We have state-of-the-art imaging equipment.

You have to have sufficient evidence to get funded.

Almost nobody will fund you with [just]

a brilliant idea.

~ Xiaoxi Qiao, M.D., Ph.D. Director Visual Neuroscience Laboratory IU Department of Ophthalmology

You don't have to walk, or drive, to another building just to read an x-ray anymore. Overall the whole research capability has been strengthened," she states.

Indeed, Dr. Qiao finds that both the chairman of the department, **Robert D. Yee, M.D.**, and the university have been supportive of her work. The department has provided financial support, space, and facilities. She has found professional development help available throughout the medical center, including grant application assistance and a writing center which supplies faculty aid in writing research papers. "The support is quite good," she states.

She also finds the neuroscience environment at the medical center considerably improved over the past few years with the development of the Stark Neuroscience Research Institute. She mentioned the core group of researchers there now and the stimulating discussions and seminars available. She knows of four female faculty members in neuroscience at the medical center.

In 2004, Dr. Qiao received a \$214,500, three-year Scientist Development Grant from the American Heart Association. This is in addition to an intramural grant from the IU School of Medicine which helped her get started here and a two-year retinal research grant from the Carl and Mildred Reeves Foundation, Columbus, Indiana that she shares with Hua Gao, M.D., Ph.D. She has other research projects "in the works" including an as yet unfunded pilot project with researchers from Case Western Reserve University in Cleveland, Ohio involving nanotechnology, a nanometer being a millionth of a millimeter in size. Dr. Qiao is assisted in her work by two postdoctoral fellows: Hongdi Meng, M.D., Ph.D. and Wei Wang, M.D., Ph.D., who she shares with other researchers in the department.

Her long range goal is to seek more support, especially from the National Eye Institute, for funding AMD research and other eye-related projects. "You have to have sufficient evidence to get funded. Almost nobody will fund you with [just] a brilliant idea," she states. Abstracts from three of her research projects were presented at the May 2005 meeting of the Association for Research in Vision and Ophthalmology.

Dr. Qiao received her M.D. from Beijing Medical College in China and her Ph.D. from Baylor College of Medicine in Houston, Texas.



Jimmy Guilford (left) greets Louis B. Cantor, M.D., the director of the IU Department of Ophthalmology Glaucoma Service, at a fund-raiser for Prevent Blindness Indiana which was held on April 24, 2005 at the Meridian Hills Country Club. Mr. Guilford, a doo-wop and soul recording artist, starred in this musical afternoon of song and dance. The event was a tribute to Dr. Cantor and highlighted glaucoma awareness and the importance of glaucoma research. Mr. Guilford is himself a glaucoma patient. Participating in the program along with Dr. Cantor was colleague, Yara M. Catoira, M.D., an assistant professor of ophthalmology in the Glaucoma Service of the IU Department of Ophthalmology.

Other guest stars of the afternoon, which was hosted by retired broadcaster Howard Caldwell, were: Shannon Forsell, Kelleen, Bob Motz, The Roy Geesa Quartet, The Counts, the Pike High School Pom Pom Girls, and additional guest artists.

DEPARTMENT WELL REPRESENTED AT CONFERENCE

Once a year, over 11,000 ophthalmologists and vision scientists gather in Fort Lauderdale, Florida to present their latest research findings and network with one another at the annual meeting of the Association for Research in Vision and Ophthalmology (ARVO). The IU Department of Ophthalmology is always well represented at this international conference.

Below is a sample of the clinical and basic research by the Department's faculty, residents, and fellows, as presented at the 2005 ARVO meeting or published in 2005 in ARVO's journal, <u>Investigative Ophthalmology & Visual Science</u>.

Researchers currently at the IU Department of Ophthalmology are indicated by **bold** type. Residents' names are in **red**.

Activity of GNAT2 Promoter in Developing Retina. S.-L. Fong and W.-B. Fong. Invest. Ophthalmol. Vis. Sci. 2005 46: E-Abstract 3134.

Age, Gender, Ethnicity and Refractive Error Related Differences in Normal Macular Thickness and Volume as Measured by STRATUS OCT.

S. Fraser-Bell, R. Varma, J. Lipyanik, V.M.
Patella, D. Budenz, L. Cantor, D. Greenfield, J. Savell, J. Schuman, and M. Ying-Lai. Invest. Ophthalmol. Vis. Sci. 2005 46: E-Abstract 1542.

Alternative Technique to the Frontalis Fascial Sling for Blepharoptosis Repair. M.H. Boyle and W.R. Nunery. Invest. Ophthalmol.Vis. Sci. 2005 46: E-Abstract 4218

The Analytic and 12-Month Biological Variability of Retinal Oximetry Measurements in Patients with Non-Neovascular Age-Related Macular Degeneration. L.E. Kagemann, A. Harris, B. Siesky, C. Klaas, R. Danis, H. Gao, T. Ciulla, C. Jonescu-Cuypers, L. McCranor, and E. Rechtman. Invest. Ophthalmol. Vis. Sci. 2005 46: E-Abstract 1574.

Comparison of Central Corneal Thickness and Visual Field Loss Within the Same Patients With Open Angle

ROGERS AND OLIVER AT ARVO



Two of the Department's residents, **David Rogers, M.D.** (left) (second-year resident) and **Alex Oliver, M.D.** (first-year resident), received Travel Grants to attend the annual meeting of the Association for Research in Vision and Ophthalmology (ARVO).

These awards are made to investigators who will be presenting at the annual ARVO meeting. Funds for Dr. Roger's grant were provided by the National Eye Institute; Dr. Oliver's grant was provided by the Retina Research Foundation.

Glaucoma. D.L. Rogers, D. WuDunn, L.B. Cantor, and Y.M. Catoira. Invest. Ophthalmol.Vis. Sci. 2005 46: E-Abstract 2478.

Comparison of Photodynamic Therapy, Intravitreal Triamcinolone or a Combined Regimen as Initial Treatment of Choroidal Neovascularization. A. Oliver, T.A. Ciulla, and R. Maturi. Invest. Ophthalmol. Vis. Sci. 2005 46: E-Abstract 317.

The Effect of Preserved and Preservative–Free Triamcinolone on Corneal Endothelial Cells. M. Rothbaum and C. Springs. Invest. Ophthalmol.Vis. Sci. 2005 46: E-Abstract 4522.

The Effects of Topical Dorzolamide on Visual Acuity and Disease Progression in Non-Neovascular Age-Related Macular Degeneration: a One-Year, Randomized, Double-Masked, Placebo-Controlled Trial. E. Rechtman, A. Harris, T.A. Ciulla, R.P. Danis, B. Siesky, L. McCranor, L.M. Pratt, M.O. Peracha, and H. Gao. Invest. Ophthalmol. Vis. Sci. 2005 46: E-Abstract 192.

Expression of Angiogenic Growth Factors in VLDL Receptor Knockout

Mouse Retina With Spontaneous Subretinal Neovascularization. W. Wang, W. Hu, H. Meng, X. Qiao, and H. Gao. Invest. Ophthalmol. Vis. Sci. 2005 46: E-Abstract 1365.

Increased Heterogeneity in Retinal Blood Flow of Glaucoma Patients. M.E. Hajee, R. Kumar, T. Brevetti, K.C. Greenidge, G. Jean-Louis, **B. Siesky**, H. Choi, L. Thompson, L. Kagemann, and **A. Harris**. Invest. Ophthalmol.Vis. Sci. 2005 46: E-Abstract 3930.

Induced Optical Aberrations of Myopic Excimer Laser Treatments. C. Springs.

Interaction of Interleukin-1 and Mechanical Stress in Mediating the Nuclear Factor Kappa B Stress Response in Trabecular Meshwork Cells. D. WuDunn and J. Haydon. Invest. Ophthalmol.Vis. Sci. 2005 46: E-Abstract 3702.

IOP-Lowering Efficacy of Bimatoprost 0.03% and Travoprost 0.004% in Patients With Glaucoma or Ocular Hypertension. L.B. Cantor, J. Hoop, L. Morgan, and Bimatoprost-Travoprost Study Group. Invest. Ophthalmol.Vis. Sci. 2005 46: E-Abstract 2451.

Continued on Page 14

DAVID SUZUKI, PH.D. FEATURED IN HISTORICAL SOCIETY EXHIBIT

David A. Suzuki, Ph.D, Professor of Ophthalmology, IU Department of Ophthalmology, was included in an 2004 exhibit entitled "Politics--Beyond the Ballot Box," at the Indiana Historical Society. The exhibit allowed viewers to "follow the stories of struggles by women and other groups to gain the right to vote [and experience] accounts of riots and scandals, voting trends, and the music these stories inspire."

At the IU Department of Ophthalmology, Dr. Suzuki is engaged in NIH funded research into gaze movement behaviors. But his inclusion in the exhibit was a recognition of both his starting point, birth in a WW II internment camp for Japanese Americans, and his current life which includes service to the community. Dr. Suzuki's photograph was included in the community service section of the exhibit, where some of his many community service activities were listed along with his affiliation with the IU Department of Ophthalmology.

Motivation

The primary motivation for Dr. Suzuki's community service is to try to enhance the lives of underserved people, a motivation which comes from a sense of outrage at social injustices and a sense of gratitude to people who helped him become a university professor and scientist and to leave what one of his high school teachers labeled a "culturally-deprived environment."

"For key teachers and people in my life and my African-American Scoutmaster, I owe a debt of gratitude. My community service is, in a sense, the only way I can partially repay this debt," relates Dr. Suzuki.

Race/Diversity

The list and description of his community service-related activities includes membership in the Race Relations Leadership Network, a group of community leaders from various ethnic, community, and government organizations who gather monthly to address

evolving race relations problems before they escalate. Related to this service is his membership on the Mayor's Race Relations Advisory Board and the Mayor's Celebration of Diversity Award selection committee. The Advisory Board was established as a group committed to meeting on short-notice to devise solutions to deal with any rapidly escalating race/diversity-related problems in the community. In order to help Mayor Bart Petersen select the recipient of the Mayor's Celebration of Diversity Award, Dr. Suzuki helps interview community corporations and organization to gauge the quality and effectiveness of their programs to embrace diversity in the corporate environment.

Asian Community

With the growth of the Asian and Asian American community in Indiana, Dr. Suzuki has also undertaken activities that specifically serve these communities. He is president of a fledgling human services organization, Asian Services of Indiana, Inc. He was the past president and current community liaison of the Hoosier Chapter of the Japanese American Citizens League, which at the national level is the oldest Asian American civil rights organization. Recognizing the importance of establishing bridges and helping others, he chairs the Asian American Alliance Indianapolis Public Schools (IPS) Scholarship Committee, which is relatively unique in awarding scholarships to deserving IPS students in grades 9 through 12 and not just to graduating seniors.

Boy Scouts of America

In the past, Dr. Suzuki was very active as an adult leader in the Boy Scouts of American. In addition to serving in a neighborhood troop as an assistant scoutmaster, he was the lodge advisor for the Crossroads of American Council Order of the Arrow, an honorcampers organization within the Boy Scouts. Both attaining a childhood dream and serving the community, he served as scoutmaster of Council Troup 212 and was privileged to attend the National Boy Scout Jamboree in Virginia. Today, he

maintains activities within scouting by periodically serving on the North Star District Eagle Board of Review.

IU/IUPUI

Service to the university community includes, but is not limited to, being an IUPUI Diversity Ambassador and a member of the IUPUI Diversity Corp, a group of university faculty and staff who are working to enhance the university community environment so that it is embracing of all peoples. He is also president of the IU Asian Pacific American Faculty and Staff Council. For 10 years, he has directed the IU Brain Awareness Outreach Program and taken neuroscience-related teaching activities into elementary, middle, and high schools. In 2001, he received the IU Trustees' Teaching Award.

Frontiers in Physiology

Dr. Suzuki is one of three IU professors involved in a \$277,350 Science Education Partnership Awards Grant which mentors two high school science teachers participating in a year-long Frontiers in Physiology Professional Development Fellowship sponsored by the American Physiological Society. "The program is designed to help high school teachers increase their understanding of scientific research methods and the importance of biomedical research."

Media

In the past, Dr. Suzuki has appeared in a WFYI broadcast, "Making Connections at the Crossroads: A Community Conversation with Judy O'Bannon" as well as in a WCTY broadcast of "Collage"—a City of Indianapolis show on diversity and race relations, sponsored by Mayor Bart Peterson.

Dr. Suzuki came to the IU Department of Ophthalmology in 1988. He is the author of over 30 research articles in his field.

OPTOMETRY-OPHTHALMOLOGY LAUNCH PARTNERSHIP

Continued From Page I and should be a model for eye care professionals worldwide."

And while the adjoining clinics are a first for the two institutions, this is by no means the first time the organizations have worked together. Dean Lowther pointed out that, "We all also benefit from other areas of cooperation on public service projects, grants, and educational opportunities."

Dr. Yee stated that "The eye clinic and the eyewear center that we share with the IU School of Optometry have improved the services that the Department can offer to our patients. [Together, our two facilities] have also expanded opportunities for clinical research." Both beautifully-appointed offices are located on the second floor of the IU Medical Group building at 200 West 103rd Street. The

optometry clinic occupies 1800 sq. feet of space and features two regular exam rooms; one low vision exam room; a special test room (e.g. photography, visual field, topography); a lab; business office, and a well-stocked dispensary with over 1200 frames.

The clinic is directed by Melanie A. Pickett, O.D., Clinical Assistant Professor of Optometry. She and her staff, Sean Knaak, O.D. (pronounced "Cannuck"), low vision specialist; Gail Chandler, optician/technician; and Michelle Benberry, billing/front office manager, offer a range of services from specialty contact lenses to primary care for all ages to a referral center for practicing optometrists to low vision services.

Besides running the clinic and seeing patients, Dr. Pickett stays busy networking with community optometrists; following up with patients; and coordinating with **Clark L. Springs, M.D.**, medical director of the IU
Eye at Carmel office, in trying to grow the refractive surgery portion of the practices.
The clinic draws patients mainly from communities in a semi-circle around Carmel and to the north, including the cities of Noblesville, Westfield, Fishers, Lawrence, and Zionsville. Optometry students from IU School of Optometry in Bloomington, Indiana will soon be rotating through the new optometry clinic.

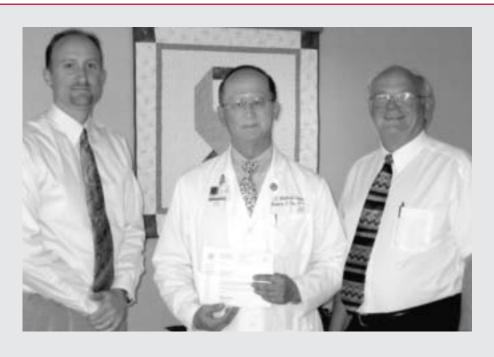
The IU School of Optometry's other facility outside of Bloomington, Indiana is located in downtown Indianapolis. Though this full-service optometry facility draws patients from the ranks of working professionals and those living downtown, it prides itself on doing extensive community outreach.

OPHTHALMIC TECHNICIANS ENTHUSIASTIC ABOUT THEIR WORK Continued From Page 7 are needed, all of which our technicians

are needed, all of which our technicians have in abundance. They are crucial for all steps in our patient examinations. These include obtaining histories, testing vision (visual acuity and color vision), testing pupil reactions, and measuring intraocular pressures.

"In addition, we rely on their expertise to perform laboratory testing that includes visual fields, ultrasonography, electroretinography, and photography of the retina. Many of our technicians complete a voluntary, didactic course for ophthalmic assistants. Others have certification for more advanced levels of training. We are very lucky to have a group of skilled, loyal, ophthalmic technicians."

Adds M. Ovais Peracha, M.D., retinal specialist, "Our technicians are true professionals, extremely courteous and polite. Even during the busiest day, you will always find them smiling. It is indeed our honor and pleasure to work with such a dedicated group of people."



Robert Yee, M.D. (center), Chairman, IU Department of Ophthalmology, is presented with a check from the Indiana Lions Eye and Tissue Transplant Bank for \$75,000 to support three clinical fellowships at the Department for 2005-2006. Pictured with Dr. Yee are Tim Fischer (left), Executive Director, and Lloyd Young (right), Chairman of the Board of Directors, Indiana Lions Eye and Tissue Transplant Bank. The Department and the Lions Eye Bank have maintained a close relationship since the founding of the Eye Bank over 50 years ago. The Eye Bank is housed in the Rotary Building, the home of the IU Department of Ophthalmology, and Department faculty members have served as its medical directors through the years. The Department gratefully acknowledges the generous and continued support of the Eye Bank in the education of ophthalmic fellows.

DEPARTMENT WELL REPRESENTED AT CONFERENCE

Continued From Page 7

Racial Differences in Ocular Hemodynamics Between African-American and Caucasian Patients With Glaucoma. B.A. Siesky, A. Harris, R. Abbasi, L. Cantor, Y. Catoira, C. Yung, D. WuDunn, C. Jonescu-Cuypers, and A. Coleman. Invest. Ophthalmol. Vis. Sci. 2005 46: E-Abstract 1330.

The Response of Retrobulbar Vasculature to Hypercapnea in Primary Open Angle Glaucoma and Ocular Hypertension. D.T. Sines, A. Harris, B. Siesky, C.-W. Yung, Y. Catoira, J.J. Garzozi, L. Kagemann, L. McCranor, and L. Cantor. Invest. Ophthalmol. Vis. Sci. 2005 46: E-Abstract 1329.

Reverse Amblyopia With Atropine Therapy. B.C. Hainline and D.T. Sprunger. Invest. Ophthalmol.Vis. Sci. 2005 46: E-Abstract 5709.

Rod Development in a Mutant Mouse With Diminished Cones. R.E. Karcavich,

C. Scott, **S.-L. Fong**, **W.-B. Fong**, and T. Jelecky-Adams. Invest. Ophthalmol. Vis. Sci. 2005 46: E-Abstract 3977.

Safety of Intravitreal Moxifloxacin: Electroretinographic and Histopathologic Study. H. Gao, M.E. Pennesi, M. Iyer, X. Qiao, E.R. Holz, and W.F. Mieler. Invest. Ophthalmol. Vis. Sci. 2005 46: E-Abstract 5553.

Temporal Dependence of Modulation of Radiation–Induced Cataractogenesis by Estrogen. S. Valluri, C. DesRosiers, E.M. Greer, A. Caperell–Grant, M.S. Mendonca, R.M. Bigsby, and J.R. Dynlacht. Invest. Ophthalmol. Vis. Sci. 2005 46: E-Abstract 839.

Temporal Development of Choroidal Neovascularization (CNV) in the Rat Laser Trauma Model. M.H. Criswell, C. J. Temm, W.-Z. Hu, T.L. Cornell, S.-L. Fong, and M.A. Clauss. Invest. Ophthalmol. Vis. Sci. 2005 46: E-Abstract 1425.

Treatment Outcomes of Choroidal Neovascularization Secondary to Ocular Histoplasmosis. G.M. Comer, T.A. Ciulla, H. Gao, and R.K. Maturi. Invest. Ophthalmol.Vis. Sci. 2005 46: E-Abstract 4070.

Vigamox: How Good Is Its Self-Preservation? M.G. Haas, C.-W. Yung, and U. Chaluvadi. Invest. Ophthalmol. Vis. Sci. 2005 46: E-Abstract 4900.

■ Mission Statement

The mission of the Indiana University Department of Ophthalmology is to provide excellence in patient care, teaching, and basic and clinical research in eye diseases and vision disorders, encompassing the values of compassion, altruism, professional integrity, intellectual curiosity, and collegiality.

RESIDENTS AND FELLOWS

■ FIRST-YEAR RESIDENTS 2005-2008

Beth Amspaugh, M.D.

from University of Wisconsin Medical School (Madison, Wisconsin)

Jason Brooks, M.D.

from Indiana University School of Medicine (Indianapolis)

Sumit Garg, M.D.

from New York Medical College, (Valhalla, New York)

Elizabeth Groves, M.D.

from Indiana University School of Medicine (Indianapolis)

Seth Kresovsky, M.D.

from Indiana University School of Medicine (Indianapolis)

Seema Vishnu, M.D.

from Medical College (Trichur, India)

■ CLINICAL FELLOWS

Glaucoma

Barbara Marsh, M.D. Ph.D.

from Indiana University School of Medicine (Indianapolis)

Oculoplastics

Jeremiah Tao, M.D. (2005–2007) from University of South Carolina School of Medicine (Columbia, South Carolina)

Matthew Hammons, M.D. (2003–2005) to private practice (Fort Worth, Texas)

Pediatric Ophthalmology

B. Christian Carter, M.D. (2005–2006) from University of Virginia School of Medicine (Charlottesville, Virginia)

Linn Mangano, M.D. (2005-2006) from West Virginia University School of Medicine (Morgantown, West Virginia)

Faruk Orge, M.D. (2004–2005) to military service (Turkey)

Leemor Rotberg, M.D. (2004–2005) to private practice (Michigan)

Retina

Joshua Greene, M.D. (2005-2006) from Long Island Jewish Medical Center (Great Neck, New York)

Gohar Salam, M.D. (2004–2005) to private practice (Fort Wayne, Indiana)

FACULTY/RESIDENT NEWS

ACTIVITIES

Alumni Reception - AAO Annual Meeting

Saturday, October 15, 2005 ■ 6-8 pm Hilton Chicago Chicago, Illinois

Questions? Contact Peggy Hannah (317) 274-2128 or phannah@iupui.edu

Fred M. Wilson II, M.D. retired from the IU Department of Ophthalmology on January 31, 2005 after 32 years of dedicated service. Dr. Wilson was co-director of the Corneal and External Eye Disease Service and co-medical director of the Indiana Lions Eye Bank. A quiet, reserved man, Dr. Wilson chose to mark his retirement in the same manner. He enjoys his free time now with his grandchildren.

Dr. Merrill Grayson's recent gifts to the IU Department of Ophthalmology include a computer, scanner, printer, and PalmPilot. His monetary donations to the Morrison Eye Library in 2004 and 2005 allowed for the purchase of additional books for the use of the faculty and residents. Dr. Grayson, Distinguished Professor Emeritus of

Ophthalmology, is an enthusiastic and longtime supporter of the IU Department of Ophthalmology.

AWARDS

The 2005 recipient of the Merrill Grayson, M.D. Ophthalmology Fellowship is Barbara Marsh, M.D., Ph.D. Dr. Marsh, who did her residency at the IU Department of Ophthalmology, will be joining the Glaucoma Service. The 2004 recipient was Gohar Salam, M.D., Vitreo-Retinal Service.

Shailaja Valluri, M.D. was selected as Professor of the Year for 2004. Dr. Valluri is an assistant professor of ophthalmology in the Corneal and External Ocular Disease Service. The 2005 winner is Hua Gao, M.D., Ph.D., Assistant Professor of Ophthalmology and Director, Vitreo-Retinal Diseases and Surgery Service.

■ NEW FACULTY



M. Ovais Peracha, M.D. Assistant Professor of Ophthalmology, joined the Vitreo-Retinal Disease and Surgery Service at the IU Department of Ophthalmology on July 15, 2004. Dr. Peracha received his

B.A. from Kalamazoo College (Kalamazoo, Michigan) and his M.D. from Wayne State University Medical School (Detroit, Michigan). He did his residency at Kresge Eye Institute at the Wayne State University School of Medicine (Detroit, Michigan) and a fellowship in Vitreo-Retinal Disease at the Cullen Eye Institute, Baylor College of Medicine (Houston, Texas).

BIRTHS

Michael Rothbaum, M.D. (third-year resident) and wife, Karin, greeted son Simon Solomon on June 12, 2004.

Matthew Hammons, M.D. (oculoplastics fellow) and wife, Elisabeth, are the proud parents of a baby girl, Natalie Jane, born October 27, 2004.

■ DEATHS

The Department regretfully reports the tragic death of Brian Stidham, M.D. on October 5, 2004 in Tucson, Arizona. Dr. Stidham was a former fellow in the Pediatric Ophthalmology and Adult Strabismus Service.

Gregory J. Toma, M.D. (resident, 1979–82) died on June 4, 2005.

TAFF NEWS

ACTIVITIES

After having passed the requisite exams, Jennifer Burnam (UCOS) is now a Certified Ophthalmic Assistant (C.O.A.); Kristy McDannald (IU Eye at Carmel) is now a Certified Ophthalmic Technician (C.O.T.).

Tim Steffens, C.R.A. (UCOS), ophthalmic photographer, had one of his photographs

selected for inclusion in a calendar published by EveNet Magazine. The winning photographs from the 2004 Ophthalmic Photographers' Society Exhibit were reviewed for possible inclusion in a calendar of ophthalmic images. Mr. Steffens' photograph, "Angoid Streaks with Choroidal Neovascular Membrane," was selected for the calendar, which is published by the American Academy of Ophthalmology (AAO). The calendar will be distributed at

the AAO Annual Meeting in Chicago, Illinois in October 2005.

■ BIRTHS

Regina (Gina) Miller, IU Eye at Carmel, is the mother of Jackson Hart, born July 11, 2004.

GIFT-GIVING OPPORTUNITIES

To discuss gift-giving opportunities to benefit the IU Department of Ophthalmology, please contact Linda Cantor in the Office of Gift Development, (317) 274-3602, lcantor2@iupui.edu, or Alex Eads in Ophthalmology Administration, (317) 274-2129, seads@iupui.edu.

For more information or to print a donation form, go to www.eyecare.iu.edu/html/gifts.shtml.

Suggested Ways to Help

- Buy ophthalmology textbooks for the library
- Donate equipment for research or vision testing
- Fund scholarships for residents/fellows
- Establish a lecture series
- Support laboratory and clinical research
- Endow a fellowship, professorship, or research fund

Thank you for your support.

OPHTHALMOLOGY UPDATE

Please send comments, correspondence, and requests for change of address to:

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■ Save this sheet for reference/referrals

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